

Amendments to the Drawings:

The attached replacement drawing sheet makes changes to Fig. 1 and replaces the original sheet with Fig. 1.

Attachment: Replacement Sheet (1)

REMARKS

Claims 1-16 are pending in this application. By this Amendment, claim 1 is amended only to correct a minor informality. Fig. 1 and the specification are also amended to correct minor informalities. Support for the amendment to claim 1 can be found in canceled claim 17. Support for the amendment to Fig. 1 can be found for example on page 15, line 22 to page 16, line 22. The specification is amended to be consistent with amended Fig. 1. No new matter is added. Claims 4, 6 and 7 are provisionally withdrawn by the Examiner as drawn to non-elected species. Rejoinder and allowance of these claims when their corresponding independent claim 1 is allowed are respectfully requested. Reconsideration of the objections and rejections in view of the above amendments and the following remarks is respectfully requested.

Entry of the amendment is proper under 37 CFR §1.116 since the amendment: (a) places the application in condition for allowance for the reasons discussed herein and during the personal interview with the Examiner; (b) does not raise any new issue requiring further search and/or consideration as the amendment merely corrects a minor informality; (c) satisfies a requirement of form asserted in the previous Office Action; and (d) places the application in better form for appeal, should an appeal be necessary. The amendment is necessary and was not earlier presented because it is made in response to arguments raised in the final rejection and in light of the discussion undertaken during the personal interview. Entry of the amendment is thus respectfully requested.

Applicants appreciate the courtesies shown to Applicants' representative by Examiner Boateng in the April 9, 2007 personal interview. Applicants' separate record of the substance of the interview is incorporated into the following remarks.

I. Objection to the Specification

The Office Action objects to the specification because "input stopping means" recited in claim 1 allegedly lacks antecedence in the original disclosure. As discussed during the interview, claim 1 is amended to recite "charged input stopping means", which was recited in original (now-canceled) claim 17. The Examiner indicated during the interview that such an amendment would not raise any new issue requiring further search and consideration. Thus, it is respectfully requested that the objection be withdrawn.

II. Objection to the Drawings

The Office Action objects to the drawings for allegedly failing to show the claimed stopping means. Fig. 1 is amended to obviate the objection. The Examiner agreed during the personal interview that modifying the figure in this manner would not raise any issues. Thus, it is respectfully requested that the objection be withdrawn.

III. Rejections of the Claims

The Office Action (1) rejects claims 1-3, 5 and 8-16 on the basis of non statutory obviousness-type double patenting over claims 1-38 of U.S. Patent Application No. 11/353,220 in view of Sullivan et al. (Sullivan), U.S. Patent No. 6,064,180; and (2) rejects claims 1-3, 5 and 8-16 under 35 U.S.C. §103(a) over Singh et al. (Singh), U.S. Patent No. 6,011,379. The rejections are respectfully traversed.

The combinations of references in both (1) and (2) fail to disclose, or to have suggested, a charged input stopping means which, when the charge accumulating device is charged during learning, prevents the input of the current values and the terminal voltage values to the neural network until energy charged in the charge accumulating device is discharged, as recited in claim 1.

The Office Action acknowledges that each of claims 1-38 of U.S. Patent Application No. 11/353,220 and Singh fails to disclose the claimed charged input stopping means and

associated features, but asserts that such features are taught by Sullivan. The Office Action on pages 7 and 8 asserts that Sullivan allows inputs to a neural network (see Fig. 1) "only during discharging" (emphasis added). However, as discussed during the personal interview, the claimed charged input stopping means prevents the input of current values and terminal voltage values to the neural network until energy charged in the charge accumulating device is discharged. That is, Sullivan teaches inputting to the neural network during discharging, but not preventing the inputting until the discharging is complete. Further, as discussed during the personal interview, Sullivan merely teaches that non-linear relationships between terminal voltage and current of the battery exist at states-of-charge where charge acceptance is greatly reduced due to inefficiencies in material conversion (see col. 4, lines 9-18). However, Sullivan fails to teach or reasonably to have suggested, that the input of the current values and the terminal voltage values to the neural network are prevented until energy charged in the charge accumulating device is discharged. Thus, Sullivan does not teach, nor can it reasonably be considered to have suggested, a charged input stopping means which, when the charge accumulating device is charged during learning, prevents the input of the current values and the terminal voltage values to the neural network until energy charged in the charge accumulating device is discharged, as recited in claim 1.

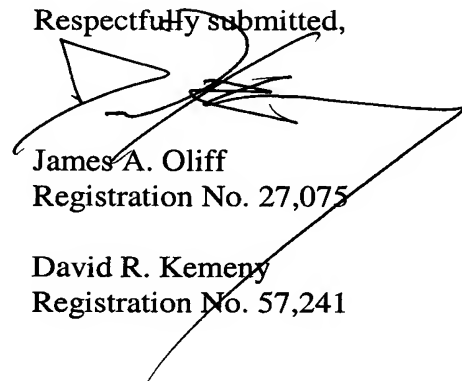
Because claims 2, 3, 5 and 8-16 incorporate the features of claim 1, these claims also are neither taught, nor would have been suggested, by any combination of the applied references for at least these reasons. Therefore, it is respectfully requested that the rejections be withdrawn.

IV. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claim 1-16 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'James A. Oliff', is written over the typed name and registration number.

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David R. Kemeny
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Attachment:
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